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## NOTICE OF ALLOWANCE AND FEE(S) DUE

23460 7590 11/18/2009 LEYDIG VOIT & MAYER, LTD TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON AVENUE CHICAGO, IL 60601-6731

EXAMINER					
RAPILLO, KRISTINE K					
ART UNIT	PAPER NUMBER				
3626					
DATE MAILED: 11/18/2	009				

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,968	03/31/2004	Howard R. Underwood	228278	5921

TITLE OF INVENTION: SYSTEM AND METHOD FOR ADMINISTERING HEALTH CARE COST REDUCTION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/18/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	form should be used to correspondence including ad below or directed oth tions.	or transr ig the Pa ierwise ii	nitting the ISSU stent, advance or n Block 1, by (a	JE FEE and PUBLICATI ders and notification of r specifying a new corres	ON FEE (if requiraintenance fees vipondence address;	ired). I vill be and/o	Blocks 1 through 5 s mailed to the current (b) indicating a sepa	nould be con corresponden rate "FEE Al	pleted where ce address as DDRESS" for
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APPLN. TYPE	SMALL ENTITY	ISSU	E FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DAT	E DUE
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RAPILLO, K	RISTINE K		3626	705-002000					
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATZ ess an assignee is ident h in 37 CFR 3.11. Comp	nge of Co " Indicati ed. Use o	on form of a Customer  PRINTED ON T	2. For printing on the p (1) the names of up to or agents OR, alternati- (2) the name of a singl- registered attorney or a 2 registered pattern ato insted, no name will be FHE PATENT (print or typ data will appear on the p T a substitute for filing an (B) RESIDENCE: (CTTY	3 registered pater rely, e firm (having as a sgent) and the nam meys or agents. If printed. ee) satent. If an assign assignment.	memb es of u no nan	er a 2p to p to get is 3	ocument has l	been filed for
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## UNITED STATES PATENT AND TRADEMARK OFFICE

## NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

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## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 833 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 833 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

## Application No. Applicant(s) 10/813,968 UNDERWOOD ET AL. Notice of Allowability Examiner Art Unit KRISTINE K RAPILLO 3626 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 8/19/2009. The allowed claim(s) is/are 1 and 6-18. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413),
- Paper No./Mail Date T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

/C. Luke Gilligan/

Supervisory Patent Examiner, Art Unit 3626

Application/Control Number: 10/813,968

Art Unit: 3626

#### DETAILED ACTION

## Response to Amendment

This communication is in response to the amendment filed August 19, 2009. Claims 1 and 6 – 18
are presented for examination.

## Claim Rejections - 35 USC § 103

 The rejections under 35 USC § 103 (a) are withdrawn by the Examiner based on the changes made by Applicant's to the claims.

## Allowable Subject Matter

 Claims 1 and 6 – 18 are allowed. The following is an examiner's statement of reasons for allowance:

The primary reasons for the allowance of claim 1 is the inclusion of the limitation in the claims, which is not found in the prior art references, of a computer implemented method for administering reductions in the cost of health care; participant data is extracted from a database consisting of a plurality of participants in a health insurance plan, where the data is comprised of medical claims and/or pharmacy claims, including procedures performed and diagnosis of a patient and drugs or medication physically administered to a patient; a predictive modeling program stored on a computer and executed on participant data to generate the output of the likelihood of a predetermined future even based on historical claims data; using the output of the predictive modeling program, determine a score for the predicted utilization of future health services for a candidate using participant data; determine a numerical second score for the intervention candidate, where the second score value is based on a function of the candidate's prior consumption of a plurality of different health care services over a predetermined time including inpatient admission, an existence of a chronic disease or condition, a medical specialty consultation, predetermined monetary threshold, and emergency room visit; compare the first score against a first threshold value and a second score against a second threshold value to identify eligible intervention candidates; provide a graphical user interface to a select individual for electronic access to

Application/Control Number: 10/813,968

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the health care history of at least one eligible intervention candidate and the result of the comparison and adapted to facilitate intervention in health care regimen of the eligible intervention candidate.

The closest prior art, Trusheim et al., herein after Trusheim (U.S. Patent Number 6,385,589) teaches a system to improve the health of a population of member patients and lower the costs of caring for the population (column 2, lines 61 - 64). A population is periodically monitored for characteristics and/or medical events (column 3, lines 1 - 11). Member characteristics are obtained from member surveys, health care providers, historical health care data (i.e. laboratory data, pharmacy data, claims data) and medical event data is collected from sources such as laboratories, pharmacy benefit managers, insurance companies, and health plans. This data is combined to indicate a risk situation (column 3, lines 18 - 28). A risk situation is defined as a situation in which a patient is at risk of incurring medical costs due to an avoidable process failure based on a combination of patient characteristics and medical events (column 2, lines 47 - 56). If a risk situation is detected, a notification is sent to a coordination specialist or another selected entity and includes the risk to the patient and guides the specialist in appropriate intervention procedures (column 4. lines 26 - 34).

The prior art reference Goetzke (U.S. Publication Number 2002/012866 A1) teaches a chronic medical condition management system which integrates the patient, payer, employer, physician, and medical specialist (paragraph [0026]). The computer software product of the medical condition management system creates a care plan for a chronic pain patient (paragraph [0009]). Modeling software is employed to establish a medical profile which is a specific mathematic score and a composite score, which is translated into a plan of care (paragraph [0067]). The software is executed to identifying individuals at risk for chronic pain indication in a population for improving the accuracy of identifying patients at risk and decreasing the time to identify the patients at risk so early intervention can be considered (paragraph [0106]).

Originally numbered claims 6 – 18 are dependent on originally numbered claim 1, and therefore incorporate the allowable features of originally numbered claim 1. Art Unit: 3626

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In related art, Jenkins et al. (U.S. Publication Number 2005/0080462 A1) teaches a method for screening patients at risk of a medical disorder, such as obesity or gastrointestinal problems. The method implements an intervention strategy for patients that will cut health costs by enabling an early section of appropriate treatments.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is not of particular significance. These prior art patents fail to teach or fairly suggest a computer implemented method for administering reductions in the cost of health care; participant data is extracted from a database consisting of a plurality of participants in a health insurance plan, where the data is comprised of medical claims and/or pharmacy claims, including procedures performed and diagnosis of a patient and drugs or medication physically administered to a patient; a predictive modeling program stored on a computer and executed on participant data to generate the output of the likelihood of a predetermined future even based on historical claims data; Using the output of the predictive modeling program, determine a score for the predicted utilization of future health services for a candidate using participant data; Determine a numerical second score for the intervention candidate, where the second score value is based on a function of the candidate's prior consumption of a plurality of different health care services over a predetermined time including inpatient admission, an existence of a chronic disease or condition, a medical specialty consultation, predetermined monetary threshold, and emergency room visit; Compare the first score against a first threshold value and a second score against a second threshold value to identify eligible intervention candidates; provide a graphical user interface to a select individual for electronic access to the health care history of at least one eligible intervention candidate and Application/Control Number: 10/813,968 Page 5

Art Unit: 3626

the result of the comparison and adapted to facilitate intervention in health care regimen of the eligible intervention candidate

5. Any inquiry concerning this communication or earlier communications from the examiner should

be directed to KRISTINE K. RAPILLO whose telephone number is (571)270-3325. The examiner can

normally be reached on Monday to Thursday 6:30 am to 4 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Luke

Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative

or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-

1000.

KKR

/C. Luke Gilligan/

Supervisory Patent Examiner, Art Unit 3626